

REMARKS

Claims 1-10, 12-14, 16-28, 35-46, 48-50, 52-64, and 71-74 will be pending in the application upon entry of this amendment. The independent claims are claim 1, reciting a computer-readable medium storing a computer application workspace generation and navigation tool, and claim 37 reciting a corresponding method. Claims 1, 3, 37, and 39 have been amended herein for the reasons set forth below (along with additional amendments as to various other claims). New claims 73 and 74 have been added.

Favorable reconsideration is requested in view of the claim amendments and following remarks.

I. ALLOWABLE SUBJECT MATTER

Applicant acknowledges with appreciation the Examiner's conclusion that claims 3, 4, 39, and 40 recite allowable subject matter. The Examiner objects to such claims as depending from respective rejected base claims. Applicant asserts, however, that the base claims, as amended, recite patentable subject matter. The objection to claims 3, 4, 39, and 40, therefore, should be withdrawn.

II. CLAIM OBJECTIONS

The Examiner objects to claims 3 and 39 for the following informality: the Examiner asserts the term "if" should be amended to "when" so the claims read more clearly. Claims 3 and 39 have been amended in accordance with the Examiner's comments. The objection, therefore, should be withdrawn.

III. CLAIM REJECTIONS – 35 U.S.C. § 112

Claim 1 and 37 stand rejected pursuant to 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner asserts the claim phrase "viewable work area location" lacks a proper antecedent basis. In accordance with the Examiner's comments, claims 1 and 37 have been amended to establish a proper antecedent basis. The rejection, therefore, should be withdrawn.

IV. REJECTIONS UNDER 35 U.S.C. § 102(a)

A. Overview of the Claim Amendments

Independent claims 1 and 37 have been amended to clarify the concept of the claimed screens as being part of a continuous logical application workspace. For example, claim 1 has been amended to recite “computer code that generates a continuous logical application workspace that is larger in size than a physically viewable work area displayed on a physical computer system display.” In addition, the logical application workspace is comprised of a plurality of screens, wherein “each logical screen has predetermined dimensions that are coextensive with the physically viewable work area on the physical computer system display such that each logical screen has dimensions that are the same as every other logical screen.” In addition, amended claim 1 further recites: “computer code that displays one of the logical screens in the physically viewable work area of the computer system display.” Comparable amendments have been made to independent method claim 37.

Support for the amendments may be found in the application at least at paragraphs [0035] and [0039-47], and Fig. 3. For example, as stated in the application, “the size of each screen 56 . . . is generally coextensive with the viewable area 55 defined by the frame 46.” (Paragraph [0040].) Such screen dimensions also are depicted specifically in Fig. 3, with screen 56f being shown as coextensive with the viewable area 55. The common dimensional aspect of the screens also is shown specifically in Fig. 3. Furthermore, the viewable area typically would be coextensive with a visible portion of a physical display device (e.g., a computer system display). (Paragraph [0035].) Accordingly, as claimed, the specification discloses a continuous logical application workspace that is larger in size than a physically viewable work area displayed on a physical computer system display, and the workspace is made of a plurality of logical screens, wherein each logical screen has dimensions that are coextensive with the physically viewable work area on the physical computer system display.

By virtue of the claimed sizing and positioning of the screens, the application workspace is divided into equal and fixed sized units each of which is coextensive to the area viewable on the physical computer system display. The application workspace also is logically continuous, meaning the screens about each other and together form a continuous navigable workspace.

For example, as described in the application, an "application workspace" 54 is generated for a computer application. The application workspace may be thought of as the entire virtual area over which application content may be present. Thus, this "logical" application workspace is not the same as what may be viewed on a physical computer display monitor at any one time. Indeed, as depicted in figure 3, and as set forth in claims 1 and 37, the continuous application workspace 54 is larger in size than the physical computer display area used to display a physically viewable work area. In figure 3, for example, a viewable area 55 is represented by the area within the frame 46.

The application workspace 54 is made up of a plurality of contiguous logical screens 56. In the example of figure 3, sixteen screens 56a-p are arranged in a 4 x 4 matrix, although other configurations may be employed. As previously explained, the term "screen" denotes a unit component of the application workspace wherein each screen has measurements corresponding to the viewable work area of the computer system display. The screens are arranged contiguously such that the application workspace is a single and functionally continuous workspace. As such, the spatial relationships of the screens and their associated content are maintained even as a user navigates around the logical workspace. For example, in figure 3, a user may navigate from screen 56f down one screen and to the right one screen (such as with scroll bars or the other claimed navigational tools) to view the sub-application windows 58g and 58h in screen 56k. Since the workspace is continuous, instead of navigating in screen sized movements the user can also incrementally navigate anywhere within the continuous workspace using a scroll bar. These movements within the workspace can be as small as one pixel width or height at a time.

As further explained below, the reference cited by the Examiner does not teach such features.

B. Rejections Based On Anderson

Claims 1, 2, 5-10, 12-14, 16-24, 26-28, 35-38, 41-46, 48-50, 52-60, 62-64, and 71-72 stand rejected pursuant to 35 U.S.C. § 102(a) as being anticipated by Anderson et al., U.S. Patent Application Publication No. 2003/0189597 (Anderson). Claims 25 and 61 stand rejected pursuant to 35 U.S.C. § 103(a) as being obvious over Anderson by itself. For several reasons, Applicant respectfully disagrees with the Examiner's interpretation of Anderson's multiple virtual desktops as a whole to be the recited claimed invention. Applicant submits the Examiner has misapplied Anderson.

Anderson discloses a system which only arranges content ***within the physically viewable area*** defined by a physical computer system display. As such, Anderson does not disclose or suggest a continuous application workspace ***larger than a physically viewable work area*** or a physical display. It necessarily follows that Anderson similarly does not disclose an application workspace comprised of a plurality of logical screens that are arranged contiguously in predetermined locations in the application workspace such that the application workspace is ***a single and functionally continuous logical workspace***, and that ***each screen*** has dimensions that are coextensive with the physically viewable work area defined by the physical display.

A careful review of the abstract, the body, the claims and the drawings of Anderson does not find one reference of a virtual desktop, even a "full sized virtual desktop", being larger than the viewable area of a computer system display. In fact, in claim 1 for example, Anderson breaks down the computer display area into both a "first periphery of the display" and a "second periphery of the display". Anderson then states that the full-sized virtual desktop occupies the "first periphery of the display". Anderson, therefore, never teaches a full sized virtual desktop larger than the viewable area of a computer system display. To the contrary, Anderson contemplates a full-sized virtual desktop sometimes being smaller than the viewable area of a physical display. Paragraph 32 of Anderson states: "The on-screen work area and the taskbar of a

corresponding full-size virtual desktop cover all or substantially all of the viewable area of the display.” In context, the phrase “substantially all” is obviously less than all.

Anderson discloses displaying multiple desktops on a single display. Each desktop is displayed as a scaled pane having dimensions proportional to, but less than, the dimensions of a non-scaled desktop. (See, e.g., paragraphs [0008], [0034], [0037], figures 5-7.)

The Examiner relies on Figs. 6 and 8 of Anderson as teaching a logical application workspace larger than a physically viewable work area defined by the physical display. Fig. 6 shows four desktops displayed in the scaled fashion, while Fig. 8 depicts one of the desktops unscaled to span the full physical display. The Examiner considers each desktop to correspond to a claimed “screen.” The Examiner appears to take the position that because one desktop can span the entire screen, the entire workspace of four desktops is larger than a viewable work area.

The Examiner, however, ignores features of the claimed screens. Each claimed screen has ***predetermined dimensions*** that are coextensive with the physically viewable work area on the physical display. In Anderson, as recognized by the Examiner, the dimensions of the desktops are not predetermined, but may be scaled and unscaled as desired by the user. Such dimensions, therefore, are at times coextensive with the physical display, and at times not, but never larger. In the claimed invention, the sizing of the screens is predetermined when the workspace is generated. Also, when an Anderson “screen” (desktop) is maximized, it is not larger than the display used to display the desktop.

The remaining desktops are tiled in the status bar (Fig. 8.), and the user may switch among the desktops to make a selected desktop active. The desktops of Anderson, therefore, do not have dimensions that are the same as every other screen when a single desktop is maximized, and any combination of maximized/tiled desktops does not form an application workspace that is larger than what is viewable in the physical display.

Also, the desktops are not a contiguous workspace. Instead, they are each logically isolated from one another. Therefore, there is nothing in Anderson which indicates multiple virtual desktops being contiguous and larger than the physically viewable area of a computer system display, as claimed. On the contrary, the only examples of multiple virtual desktops shown by Anderson are when they are collectively shown in scaled versions (see Fig 5, Fig 6 and Fig.7). Referring to Fig 5 which shows multiple virtual desktops, Anderson states in Paragraph 34 that the “multiple panes 312-318 covers the area of the display normally covered by a full-size virtual desktop, i.e., the entire viewable area of the display”.

Additionally, Anderson does not teach opening more than one full-sized virtual desktop at a time. Anderson teaches a method “to preview multiple virtual desktops in a graphical user interface”. Anderson then teaches a method to switch between virtual desktops. Anderson teaches only having one full sized virtual desktop open at a time. For example, claim 3 of Anderson recites that when the user chooses a newly selected virtual desktop over the current virtual desktop, the current virtual desktop shrinks and the newly selected virtual desktop expands to fill the “first periphery of the display.” Claim 3 of Anderson also recites the shrinking and expanding of the virtual desktop panes, and refers to the selected virtual desktop pane being expanded to “a current full-size virtual desktop in the view of the user”. **The switching, shrinking and expanding of virtual desktops has nothing to do with the Applicant’s invention.**

Furthermore, Anderson does not teach navigation through a virtual desktop. He teaches switching between virtual desktops. This is in direct contrast to Applicant’s logical workspace in which a user can navigate anywhere within the continuous logical workspace either in small incremental movements using a scroll bar, or moving from screen to screen using a navigational tool as set forth in various dependent claims.

The Examiner also asserts that the virtual desktops in Anderson together constitute a continuous logical application workspace. The Examiner bases this conclusion on the features that a user may switch from one desktop to another, and that desktops may share applications. The Examiner simply is incorrect in his conclusion

that the desktops of Anderson form a continuous logical application workspace as claimed. For example, Anderson does not disclose scrolling through adjacent desktops or otherwise navigating seamlessly through his desktops as one virtual space. Anderson only allows for switching from one distinct virtual desktop to another distinct virtual desktop.

Anderson's ability to share applications among desktops does not lead to a reasonable conclusion that the desktops are one virtual space. An application that is shared among desktops only means that the application is accessible from each desktop that "shares" the application. It does not mean that the desktops join to form a contiguous workspace as claimed.

Applicant disagrees with the Examiner's interpretation that because the sum of "multiple virtual desktops in full size mode" makes a workspace larger than a physically viewable work area, it is equivalent to the Applicant's invention. There is not a single reference anywhere in Anderson to a work area being any larger than the "first periphery" of a computer system display. If one were to aggregate the areas of all of Anderson's multiple virtual desktops when each is in full-sized mode, they would be larger in total area than the physically viewable work area of a computer monitor. But this does not mean that Anderson's desktops disclose or suggest that which is claimed. For example, if one were to open multiple computer programs in full sized mode, or multiple instances of tiled of documents within a computer program such as those found in Microsoft Word or Microsoft Excel for example, their areas collectively would be larger than the physically viewable work area of a computer system display. But, since Anderson's desktops are logically isolated from each other in the way each open computer program is a separate entity from each other in the above example, there is no disclosure of a contiguous logical work area larger than a physical computer system display in Anderson.

The purported screens in Anderson, each being a separate desktop, do not form a continuous workspace. As should be readily apparent, Anderson simply discloses tiling distinct desktops, but those desktops are each independent of each other and do

not form a single, continuous logical workspace. For example, if a user were to drag an application window to the edge of one of Anderson's purported screens (scaled desktop), the window would disappear from the scaled desktop in the same way as when only one full size desktop is displayed. The application window could not be dragged to an adjacent desktop; nor could an application window straddle two desktops. (In contrast, see, e.g., figure 3 of the Application, element 58d.) Nor can a user scroll or otherwise navigate continuously among the desktops. The multiple desktops of Anderson simply are not positioned relative to another in a continuous workspace, as are the claimed screens. Indeed, there is no spatial relationship among the multiple desktops of Anderson at all.

In contrast, as recited in claims 1 and 37, the claimed screens are arranged contiguously in predetermined locations in the application workspace. In the claimed invention, therefore, the positioning of the screens relative to one another also is predetermined when the workspace is generated or expanded. The predetermined positioning of the screens permits a user to navigate the workspace by selecting a particular screen, such as, for example, by using a navigation box that depicts the screens configuration in a miniaturized format (see paragraphs [0057-0060 and Fig. 7], or with a drop-down menu that identifies each screen based on its position in the workspace (see paragraphs [0062-0063] and Fig. 8). Furthermore, by virtue of the claimed sizing and positioning of the screens, the application workspace essentially is divided into equal and fixed units. Accordingly, although a user may alter what area of the logical workspace constitutes the viewable area within the workspace, the positioning of the viewable area is independent of the configuration (size and position) of the screens within the workspace. The spatial relationships of the screens are thus predetermined for easy navigation across the entire workspace. No such features are present in the tiled desktops disclosed in Anderson.

At no time does Anderson claim that the total work area at any one time is larger than the viewable area of a computer display. If one does a keyword search of Anderson searching for the words "continuous", or "contiguous", or "logical" or "bigger" or "larger", there are no matches found. Nor does a careful reading from start to finish

of Anderson reveal a conceptual equivalent of the terms and the underlying concepts of the Applicant's claims. In contrast to Anderson, the Applicant's claims recite a continuous logical workspace, composed of **contiguous** logical screens, larger in size than a physically viewable work area and a computer system display.

For at least the foregoing reasons, Anderson does not anticipate independent claims 1 and 37, and therefore does not anticipate or render obvious any of the dependent claims for at least the same reasons. Accordingly, the rejections based on Anderson should be withdrawn.

V. CONCLUSION

For the foregoing reasons, claims 1-10, 12-14, 16-28, 35-46, 48-50, 52-64, and 71-74 recite patentable subject matter. Accordingly, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If the application is not in condition for allowance, the Examiner is invited to contact the undersigned representative by telephone to resolve any outstanding issues.

If there are any fees resulting from this communication, please charge same to our Deposit Account No. 18-0988, our Order No. CUTCP0103US.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By /MDavidGalin/
M. David Galin; Reg. No. 41,767

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
Telephone: (216) 621-1113
Facsimile: (216) 621-6165